



11TH EDITION OF
WORLD NANOTECHNOLOGY
CONFERENCE
&
9TH EDITION OF
INTERNATIONAL CONFERENCE ON
MATERIALS SCIENCE
AND ENGINEERING



HYBRID EVENT
23-25
MARCH 2026

IN-PERSON:

Village Hotel Changi

1 Netheravon Rd,
Singapore 508502

VIRTUAL:

Greenwich Mean Time (GMT)

**MONDAY
MARCH 23,
2026**

DAY 01 | In-Person @Sphere 1 Meeting Hall

08:00-08:50	Registrations
08:50-09:00	Opening Ceremony and Introduction
09:00-11:00	Keynote Sessions
11:00-11:30	Coffee Break
11:30-12:50	Oral Sessions
12:50-14:00	Lunch Break
14:00-15:00	Oral Sessions
15:00-15:30	Poster Sessions
15:30-16:00	Coffee Break

**TUESDAY
MARCH 24,
2026**

DAY 02 | In-Person @Sphere 1 Meeting Hall

08:50-09:00	Opening Ceremony and Introduction
09:00-10:20	Keynote Sessions
10:20-11:00	Oral Sessions
11:00-11:30	Coffee Break
11:30-12:50	Oral Sessions
12:50-14:00	Lunch Break
14:00-15:20	Oral Sessions
15:20-15:50	Coffee Break

**WEDNESDAY
MARCH 25,
2026**

DAY 03 | ROOM 1 Virtual @Zoom Meetings

08:30-09:00	AV Check
09:00-09:40	Oral Sessions
09:40-10:00	Poster Sessions
10:00-15:20	Oral Sessions
15:20-15:30	Poster Session
15:30-16:50	Keynote Sessions

DAY 03 | ROOM 2 Virtual @Zoom Meetings

08:30-09:00	AV Check
09:00-12:20	Keynote Sessions
12:20-16:00	Oral Sessions
16:00-16:10	Poster Session
16:10-16:30	Oral Session

Important Note

The conference follows Singapore Time (SGT) for In-Person and Greenwich Mean Time (GMT) for Virtual Sessions.

When the program refers to Local Timings, it means that the timing mentioned is based on the time zone of the presenter's country.

In-Person presentations will take place in the **Sphere 1 Meeting Hall** @Village Hotel Changi and

Virtual presentations will take place in Zoom Meetings.

Please remain accessible in the hall or on Zoom throughout the day as there could be minor program adjustments due to technical issues or presenter no-shows.

08:00-08:50	Registrations
08:50-09:00	Opening Ceremony and Introduction

Moderator:
Daneti Saradhi Babu, Alliance Concrete Singapore
Pte Ltd, Singapore

Chairs:
Nasimuddin, Institute for Infocomm Research, A*STAR,
Singapore
M.G.H.Zaidi, G.B.Pant University of Agriculture &
Technology, India

09:00-09:40

Keynote Session

Nasimuddin, Institute for Infocomm Research, A*STAR, Singapore

Title: Role of tunable materials in next-generation reconfigurable antenna design

09:40-10:20

Keynote Session

M.G.H.Zaidi, G.B.Pant University of Agriculture & Technology, India

Title: Clean and dry processing of polymer materials in supercritical fluids

10:20-11:00

Keynote Session

Masami Okamoto, Toyota Technological Institute, Japan

Title: Fabrication of cartilage/natural rubber latex biocomposites

11:00-11:30

Group Photo | Coffee Break @Foyer

11:30-11:50

Oral Session

Silvie Maria Tanu Halim, McMaster University, Canada

Title: Determination of phase stress flow curves in dual phase steels through micromechanical adaptive iteration algorithm

11:50-12:10

Oral Session

Wei Shao, Warsaw University of Technology, Poland

Title: Effect of Ag on the precipitation stability in Al-Mg-Si-Ag alloy: First-principles calculations, Calphad modeling and experimental validation

12:10-12:30

Oral Session

Keisuke Kataoka, Meijo University, Japan

Title: Registry-dependent adhesion and corrugation tendency of graphene on $\text{Al}_2\text{O}_3(0001)$: DFT energy landscapes and continuum insights

12:30-12:50

Oral Session

Wajid Ali Shah, Hiroshima University, Japan

Title: Thermodynamics of AB_2 type hydrogen storage alloys with different composition

12:50-14:00

Lunch Break @Restaurant

14:00-14:20

Oral Session

Mingliang Men, Beihang University, China

Title: Investigation on forming limits under complex loading paths considering intermediate annealing: Experiments and multi-scale simulations

14:20-14:40

Oral Session

Daneti Saradhi Babu, Alliance Concrete Singapore Pte Ltd, Singapore

Title: Applications of fibre-reinforced concrete in building and infrastructure projects in Singapore

14:40-15:00

Oral Session

Ján Kruželák, Slovak University of Technology in Bratislava, Slovakia (Slovak Republic)

Title: Biopolymer filled rubber compounds with applied low molecular weight plasticizers

15:00-15:30

Poster Sessions @Foyer

P1

Poster Session

Chun-Feng Lai, Feng Chia University, Taiwan

Title: Anisotropic In(Zn)P-based nanocrystals with high photoluminescence quantum yield and broadband for Near-Infrared LEDs

P2

Poster Session

Ján Kruželák, Slovak University of Technology in Bratislava, Slovakia (Slovak Republic)

Title: Rubber composites with EMI absorption shielding performance

P3

Poster Session

Norio Inui, University of Hyogo, Japan

Title: Stabilizing levitation of a graphene flake in a magnetic field through the Casimir effect

P4

Poster Session

Qingqing Zuo, Zhejiang University, China

Title: Design and combinatorial synthesis of biomimetic multivariate metal-organic frameworks for efficient drug loading

P5

Poster Session

Jia-Chuan Lin, National Taipei University, Taiwan

Title: Flexible high specific capacitance supercapacitor based on Laser-Induced Graphene with an optimize design on interdigitated electrodes

15:30-16:00

Coffee Break @Foyer

End of Day 1

08:50–09:00 Opening Ceremony and Introduction

Moderator:

Vaishnavi A. Khalas, Pandit Deendayal Energy University, India

Chair:

Ramdas Sawleram Damse, Retired Scientist, HEMRL, India

09:00–09:40

Keynote Session

Ramdas Sawleram Damse, Retired Scientist, HEMRL, India

Title: Evaluation of mineral jelly as suitable waterproofing material for ammonium nitrate

09:40–10:20

Keynote Session

Deepa Sharma, DHE, Govt. of Haryana, India

Title: From electrons to engineering: How DFT-based simulations are transforming materials design

10:20–10:40

Oral Session

M. V. B. Krishnam Raju, IIT Bombay, India

Title: Microstructure and texture evolution of hydro formed austenitic stainless steel tubes

10:40–11:00

Oral Session

Su Mon Thit, Singapore University of Technology and Design (SUTD), Singapore

Title: Thickness-driven efficacy: The role of conformal coating thickness in electrochemical corrosion protection

11:00–11:30

Group Photo | Coffee Break @Foyer

11:30–11:50

Oral Session

Małgorzata Obrycka, University of Gdańsk, Poland

Title: Nanotechnology and eyetracking: Ethical challenges in educational research

11:50–12:10

Oral Session

Rashad Al-Gaashani, Qatar Environment and Energy Research Institute (QEERI/HBKU), Qatar

Title: Cellulose-derived biochar modified with iron oxide and ZnO nanoparticles by a novel one-step pyrolytic method for removal of emerging contaminants from water

12:10-12:30

Oral Session

Winy Kgabo Maboya, University of South Africa, South Africa

Title: Enhancement of defects on nitrogen-doped carbon nanomaterials via chlorination: Experimental and theoretical studies

12:30-12:50

Oral Session

Vaishnavi A. Khalas, Pandit Deendayal Energy University, India

Title: Self-assembly of nobiletin into nanoparticles for improved therapeutic potential

12:50-14:00

Lunch Break @Restaurant

14:00-14:20

Oral Session

Venkata Giridhar Reddy Potamsetti, Nousen Biotics, United Kingdom

Title: Nanotechnology for nutritional equity: Liposomal delivery systems at the frontier of food and health

14:20-14:40

Oral Session

Jyoti Maheshwari, Govind Ballabh Pant University of Agriculture and Technology, India

Title: Supercritical assisted synthesis of controlled release formulations for sustainable agriculture

14:40-15:00

Oral Session

Chaoyu Xiang, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, China

Title: Direct photolithography of smart optoelectronic materials for high-resolution display applications

15:00-15:20

Oral Session

Jiawei Tang, Southeast University, China

Title: Computational exploration of 2D materials: From metal to MXene and XMene layers

15:20-15:50

Coffee Break @Foyer

End of Day 2

08:30–09:00

AV Check

Moderator:**Sanchez Amono María Paz**, CEVE–AVE–CONICET, Argentina**Chair:****Osman Adiguzel**, Firat University, Turkey

GMT

LOCAL TIMINGS

09:00–09:20

09:00–09:20

Oral Session

Aki Watanabe, The King's School Canterbury, United Kingdom

Title: Shining a light on dye removal: A scoping review on the commercial viability of photocatalytic degradation of methylene blue dye

09:20–09:40

12:20–12:40

Oral Session

Osman Adiguzel, Firat University, Turkey

Title: Shape reversibility and the role of thermomechanical treatments in memory behavior of shape memory alloys

09:40–09:50

18:40–18:50

Poster Session

Sang Hyeon Im, Dong Eui University, Korea, Republic of

Title: Demagnetization methods considering the magnetic properties of ferromagnetic materials

09:50–10:00

18:50–19:00

Poster Session

Sang Hyeon Im, Dong Eui University, Korea, Republic of

Title: Optimal applied magnetic field considering magnetic saturation in ferromagnetic demagnetization systems

10:00–10:20

19:00–19:20

Oral Session

Hyunyeol Rho, Sungkyunkwan University, Korea, Republic of

Title: Low-temperature plasma-engineered hafnia ferroelectrics for high-performance flexible thin-film transistors

GMT

LOCAL TIMINGS

10:20-10:40

19:20-19:40

Oral Session

Yongin Cho, Sungkyunkwan University, Korea, Republic of

Title: Augmented quantum dot-enhanced IGZO-Te heterogeneous photodiode enabling synaptic in-sensor image processing

10:40-11:00

18:40-19:00

Oral Session

Jieqiong Hu, Kunming University, China

Title: Platinum-based nanocatalysts for fuel cells: Design, synthesis, and performance evaluation

11:00-11:20

19:00-19:20

Oral Session

Li Liu, School of Microelectronics, China

Title: Research on degradation and failure mechanisms of Un-clamped-Inductive-Switching characteristics of p-GaN HEMT device

11:20-11:40

19:20-19:40

Oral Session

Andrey V. Shobukhov, Shenzhen MSU-BIT University (SMBU), China

Title: Spatially non-uniform steady states in concentration-dependent diffusion

11:40-12:00

18:40-19:00

Oral Session

Andrei V. Arzhannikov, Budker Institute of Nuclear Physics SB RAS, Russian Federation

Title: Polymeric materials transformation under exposure by a megawatt pulse flux of submillimeter radiation (First realization)

12:00-12:20

19:00-19:20

Oral Session

Vasily Lutsyk, Institute of Physical Materials Science (SB RAS), Russian Federation

Title: Computer 3D models of isobaric Phase Diagrams (PD): Novel tool of materials science

GMT

LOCAL TIMINGS

12:20-12:40

18:20-18:40

Oral Session

Abu M. Fuad, University of Scholars, Bangladesh

Title: Emerging sustainable electric vehicle for developing South-Asian countries

12:40-13:00

18:10-18:30

Oral Session

Mukesh Chandra Dimri, Jaypee University of Engineering and Technology, India

Title: Pulsed laser deposited YIG nanolayers on silicon for spintronic applications

13:00-13:20

16:00-16:20

Oral Session

**Evgeny Grigoryev, Merzhanov Institute of Structural Macrokinetics and Materials Science
Russian Academy of Sciences, Russian Federation**

Title: Features of high-voltage consolidation of powder materials

13:20-13:40

15:20-15:40

Oral Session

Ernestine Atangana, University of the Free State, South Africa

Title: Covalent crosslinking of cellulose-chitosan biopolymers via aldehyde linkers: Synthesis, characterization, and enhanced antibacterial functionality

13:40-14:00

14:40-15:00

Oral Session

Alain Portavoce, IM2NP/CNRS, France

Title: Modeling phase crystallization in Ge-rich Ge-Sb-Te PCRAMs

14:00-14:20

15:00-15:20

Oral Session

Ahlem Abidi, Tunis El Manar University, Tunisia

Title: Improving the similarity between photon-atom quantum state and its coherent state by a coherent superposition added-subtracted photon

GMT

LOCAL TIMINGS

14:20-14:40

15:20-15:40

Oral Session

Saida Benhmida, Tunis El Manar University, Tunisia

Title: Finite element simulation of tibial insert mechanical behavior using polyethylene materials

14:40-15:00

15:40-16:00

Oral Session

Arash Ebrahimi, Comenius University Bratislava, Slovakia (Slovak Republic)

Title: Present-day advances in metalloporphyrin metal-organic frameworks and their practical applications

15:00-15:20

12:00-12:20

Oral Session

Sanchez Amono María Paz, CEVE-AVE-CONICET, Argentina

Title: Innovative and sustainable building components. Study case: Rubber and plastic roofing tiles

15:20-15:30

23:20-23:30

Poster Session

Xu Wang, Peking University School and Hospital of Stomatology, China

Title: Bioinspired nanofibrous spongyhydrogels via the Hofmeister effect and thermally co-induced assembly

15:30-16:10

12:30-13:10

Keynote Session

Paulo Cesar De Moraes, Catholic University of Brasilia, Brazil

Title: Prospective study of copper sulfide nanofilms

16:10-16:50

12:10-12:50

Keynote Session

Harry Ruda, University of Toronto, Canada

Title: Harnessing the unique properties of engineered nanostructures for sensing

End of DAY 03
ROOM 1

08:30–09:00

AV Check

Moderator:**Aditi Das Talukdar**, National Institute of Technology, Rourkela, India**Chair:****S.V.A.R.Sastry**, Harcourt Butler Technical University, India

GMT

LOCAL TIMINGS

09:00–9:40

20:00–20:40

Keynote Session

Raman Singh, Monash University, Australia

Title: Circumventing challenges in developing CVD graphene on steels: A disruptive approach to remarkable and durable corrosion resistance

09:40–10:20

15:10–15:50

Keynote Session

S.V.A.R.Sastry, Harcourt Butler Technical University, India

Title: Nanomaterial-based bio-lubricant additives for improved efficiency and environmental sustainability in automotive applications

10:20–11:00

13:20–14:00

Keynote Session

Khavkin Aleksandr, Peoples' Friendship University of Russia (RUDN), Russian Federation

Title: Carbon nanotechnology in nature

11:00–11:40

08:00–08:40

Keynote Session

Paulo Cesar De Moraes, Catholic University of Brasilia, Brazil

Title: Evaluating cytotoxicity of metal-doped tin oxide nanoparticles

11:40–12:20

07:40–08:20

Keynote Session

Thomas J. Webster, Hebei University of Technology, China

Title: 40,000 implants in humans and no failure: The impact of nanomedicine

12:20–12:40

20:20–20:40

Oral Session

Vladimir Chigrinov, Hong Kong University of Science and Technology, Hong Kong

Title: Liquid crystal photolainment on azodye nanolayers for new liquid crystal devices: Physics and applications

GMT

LOCAL TIMINGS

12:40-13:00

18:10-18:30

Oral Session

Chayanika Baishya, Indian Institute of Technology, Guwahati, India

Title: A broadband, angle-insensitive aluminium-based Near Infra-Red absorber for protecting warfighters and sensitive optics technologies

13:00-13:20

18:30-18:50

Oral Session

Hrishikesh Jadhav, Indian Institute of Technology, Bombay, India

Title: Effect of surface texture on self organization of titania nanotubes

13:20-13:40

18:50-19:10

Oral Session

Dharmendra Kumar, Swami Vivekanand Subharti University, India

Title: Improvement of pharmacokinetic parameters of BCS class IV drug for cancer treatment using nanotechnology

13:40-14:00

16:40-17:00

Oral Session

Osman Adiguzel, Firat University, Turkey

Title: Dual memory characteristics and crystallographic transformations in shape memory alloys

14:00-14:20

19:30-19:50

Oral Session

Seiko Jose, Central Sheep and Wool Research Institute, India

Title: Investigation of effect of nano kaolinite as a filler in the coarse wool - vinyl ester composite

14:20-14:40

19:50-20:10

Oral Session

K. Vaidhegi, BS Abdur Rahman Crescent Institute of Science and Technology, India

Title: Polymer nanocomposites for microbial fuel cells

GMT

LOCAL TIMINGS

14:40-15:00

17:40-18:00

Oral Session

Sergey G. Lebedev, Institute for Nuclear Research of Russian Academy of Sciences, Russian Federation

Title: Pseudo magnetic field, with a strength of hundreds of teslas in the nanographite films

15:00-15:20

11:00-11:20

Oral Session

Raymond Compton Jagessar, University of Guyana, Guyana

Title: Porphyrins as Nanosensors

15:20-15:40

11:20-11:40

Oral Session

Raymond Compton Jagessar, University of Guyana, Guyana

Title: Porphyrin nanocomposites in nanotechnology

15:40-16:00

12:40-13:00

Oral Session

Mohammad-Nabil Savari, Tehran Medical Branch, IAU, Iran

Title: Theranostic anti-glioma smart nanoplatform with radio frequency and X-Ray therapy

16:00-16:10

21:30-21:40

Poster Session

Aditi Das Talukdar, National Institute of Technology, Rourkela, India

Title: Development of GO-SiO₂ based superhydrophobic surface for oil and water separation

16:10-16:30

21:40-22:00

Oral Session

Nitasha Pathak Joshi, Manglaytan University, India

Title: Harnessing silver nanoparticles with pretomanid for enhanced antimycobacterial therapy

WE WISH TO MEET YOU AGAIN AT OUR UPCOMING EVENTS

10th Edition of the
International Conference on Materials Science and Engineering
March | Rome, Italy | HYBRID EVENT
<https://magnusconferences.com/materials-science/>

12th Edition of
World Nanotechnology Conference
March | Rome, Italy | HYBRID EVENT
<https://worldnanotechnologyconference.com/>

A stylized illustration of the Singapore skyline in light green, featuring the Esplanade - Theatres on the Bay, Marina Bay Sands, the Marina Bay Sands SkyPark, the Singapore Flyer, and the Esplanade - Theatres on the Bay. The word "SINGAPORE" is written in large, white, sans-serif capital letters across the top of the illustration.

SINGAPORE

Questions? Contact

Phone: +1 (702) 988-2320 | Whatsapp: +1 (640) 666-9566

E-mail: secretary@magnusconference.com